

ABSTRACT

In a moving magnet type linear actuator (10), a stator (30) having an armature (32) including a magnetic iron core (33) fixed on a stator base (31) and an armature winding (34) wound around the magnetic iron core (33); and a movable body (20) having a field permanent magnet (21) arranged oppositely to the magnetic iron core (33) through a magnetic gap and a magnetic holder (22) supporting the field permanent magnet (21) and movably arranged on the stator base (31), the magnetic holder (22) is made of a non-magnetic substance, and a magnetic back yoke (39) is arranged on the side opposite to the armature with respect to the field permanent magnet (22) to form a gap between the magnetic back yoke (39) and the field permanent magnet (21) and is fixed to supporters provided on the stator base (31). In accordance with this configuration, there is provided a moving magnet type linear actuator which can reduce the weight of the movable body to improve the accelerating performance and gives no problem about the life of linear guides.